
Optical Mark Reader (OMR) User Manual

Contact the Centre for Teaching and Learning
for additional assistance.

CTL Helpdesk
ADM 103 from 8:30am-4:30pm
250.807.9293
ctl.helpdesk@ubc.ca





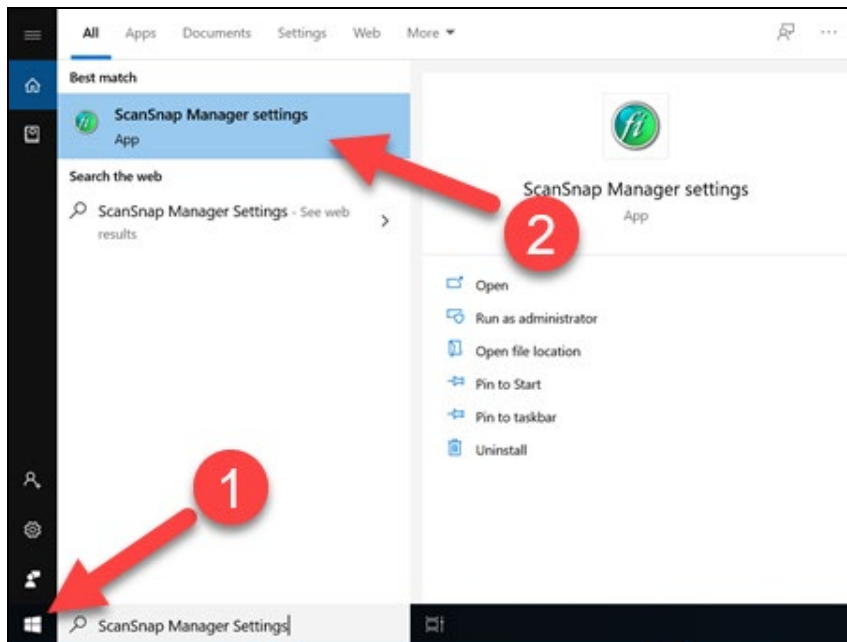
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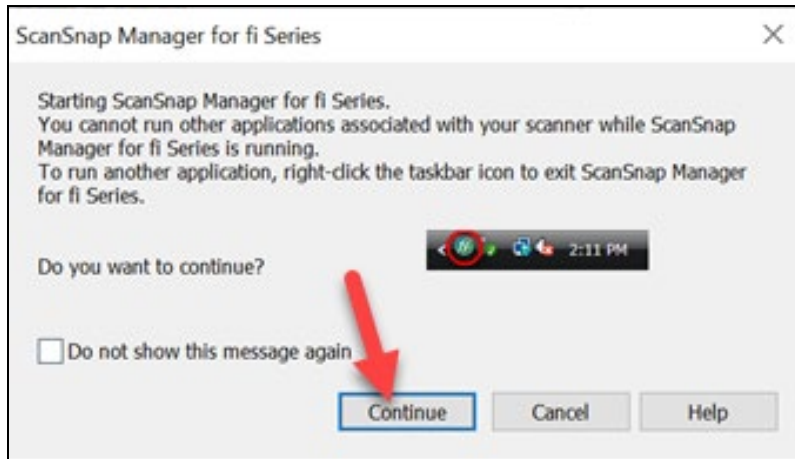
SCANNING EXAM PAPERS

1. Open up your **H: Drive** and create a new folder to store your files for this OMR session (name the folder preferably with the course name, and include the year, and the quiz/exam name, i.e. NRS300 001 Midterm 1).
Note: If you are unable to find the **H: Drive** and do end up saving on the desktop, please email/ upload them to your UBC OneDrive account. Also, delete all the folders that were created on the desktop.
2. Click on the **Start Menu (1)** in the bottom left corner of the screen > Type in **ScanSnap Manager Settings**, and open **ScanSnap Manager Settings (2)** (We are referring to ScanSnap Manager Settings not ScanSnap Manager).





3. Click **Continue**

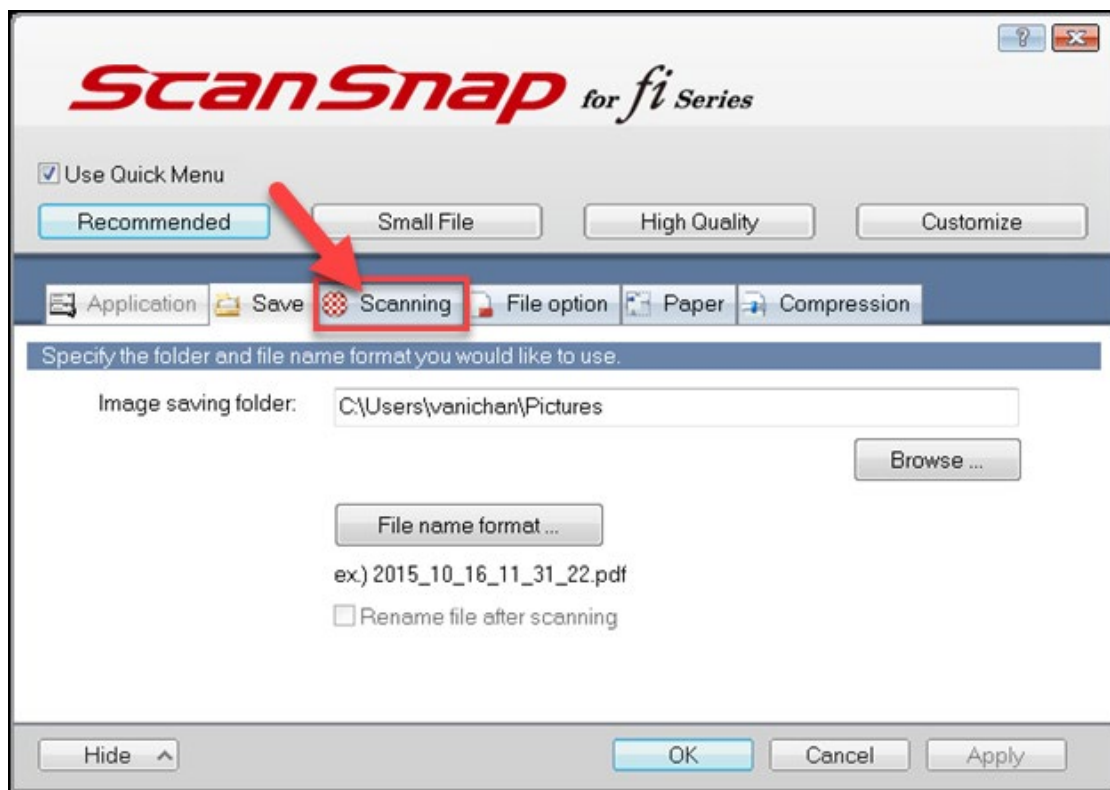


4. Click **Detail**



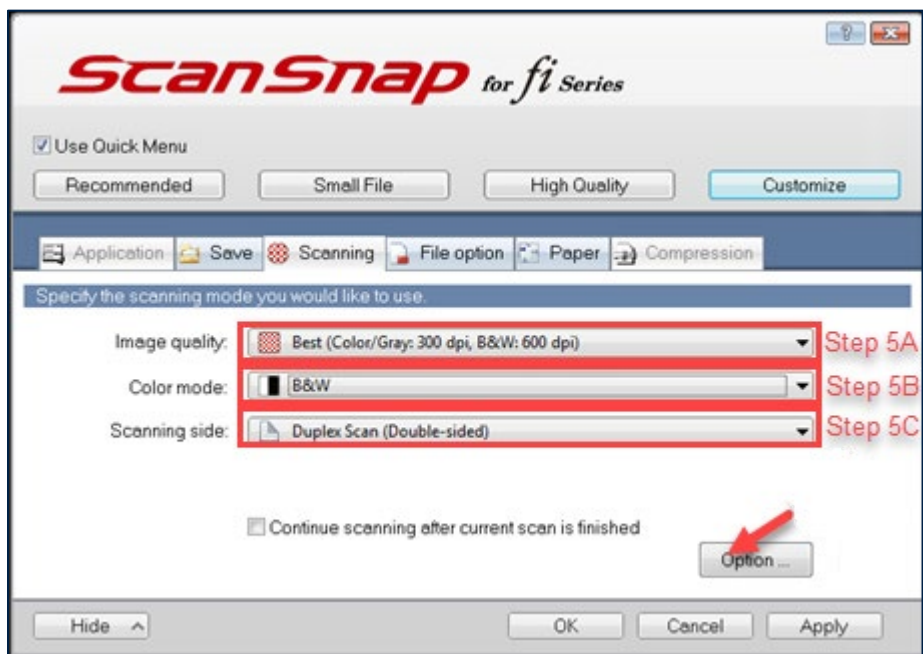


5. Click **Scanning**

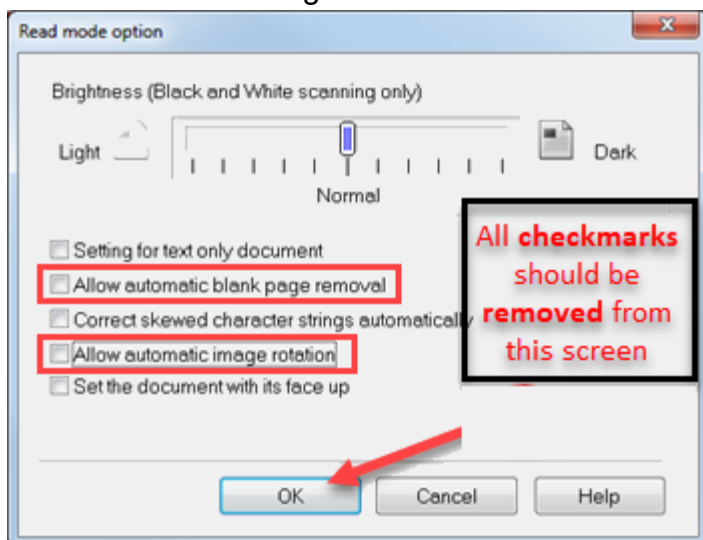


6. Under the Scanning tab, change the following settings:
 - a. Image Quality to **Best**
 - b. Color mode to **B&W**
 - c. Scanning side to **Duplex Scan (Double-sided)**

Click on the Option ... button on the lower left of the same page

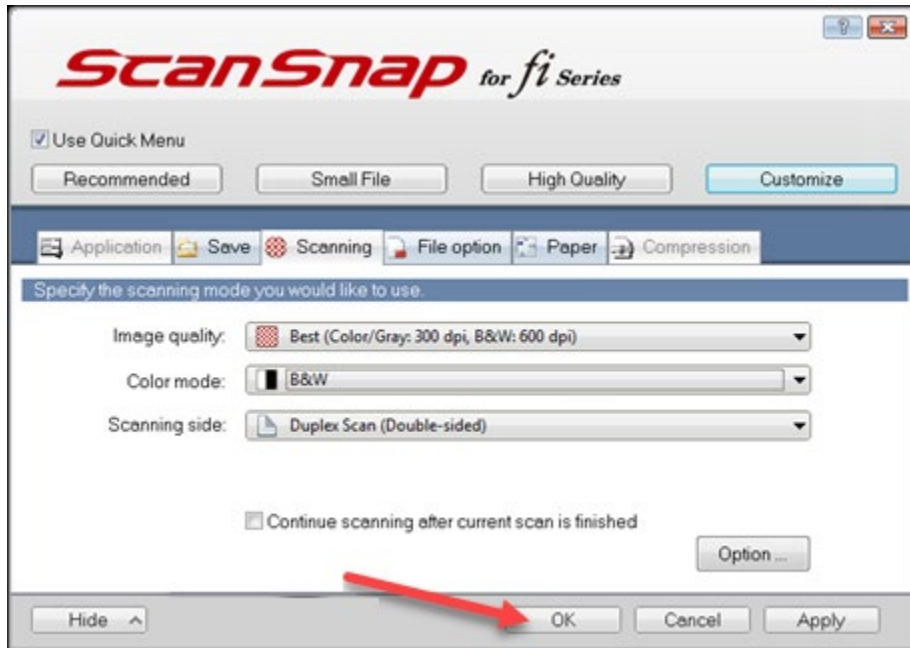


7. Make sure the following are **unselected**, then click **OK**:
 - a. “Allow automatic blank page removal”
 - b. “Allow automatic image rotation”





8. Click **OK** on the Scan Settings page.



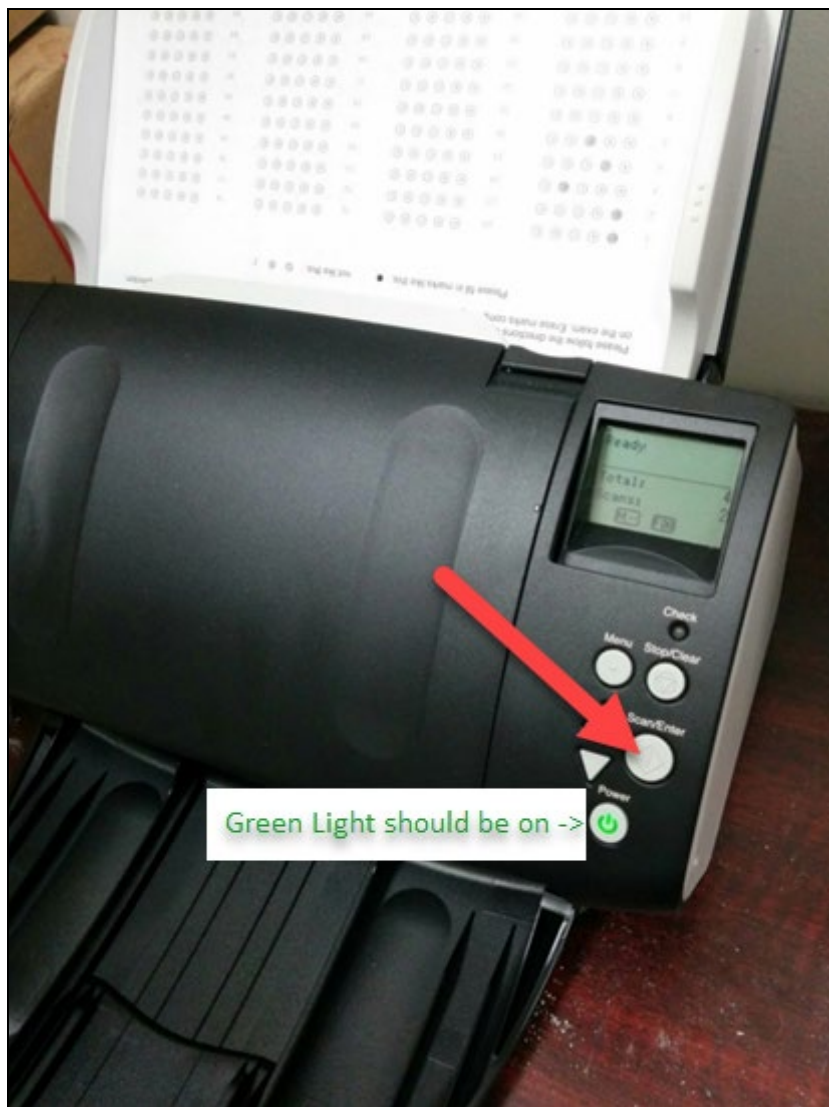


9. Get the answer sheets ready:
 - a. Count how many sheets you have (including the answer key).
 - b. For better scanning results, divide the exams into **piles of 40 sheets or less**.
 - c. Ensure all pages are aligned and **facing the same way**.
 - d. With the student ID section face up, place the answer key on the top of the pile.
 - e. Flip the pile of sheets over so that the student ID section is face down and the answer key is now on the bottom of the pile.
 - f. Rotate the pile of sheets so that the text is upside down and place the pile **into the feed tray** of the scanner **with the answer key at the bottom of the pile, in contact with the feed tray**. This will ensure that it is grabbed by the scanner first.
 - g. **Make sure the catchment tray** (circled in blue below) **is pulled out**, or the answer sheets will go flying!



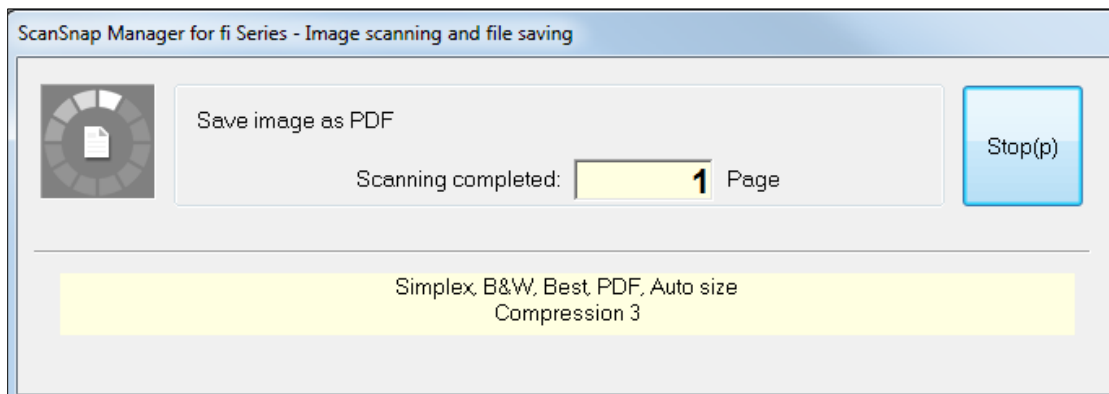


10. Make sure the scanner is turned on (the power button light is green), then press the **Scan/Enter** button on the machine.

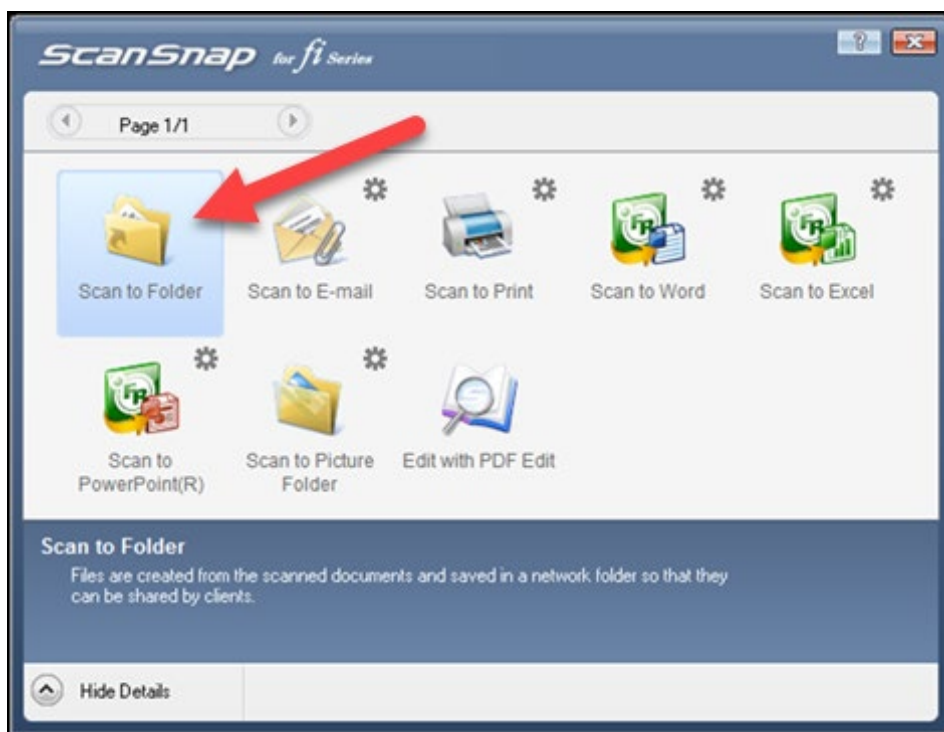




11. Once scanning begins, a progress bar will appear on the lower right of the screen. Each “page” scanned represents one side, so the number will be double the number of sheets you put in.

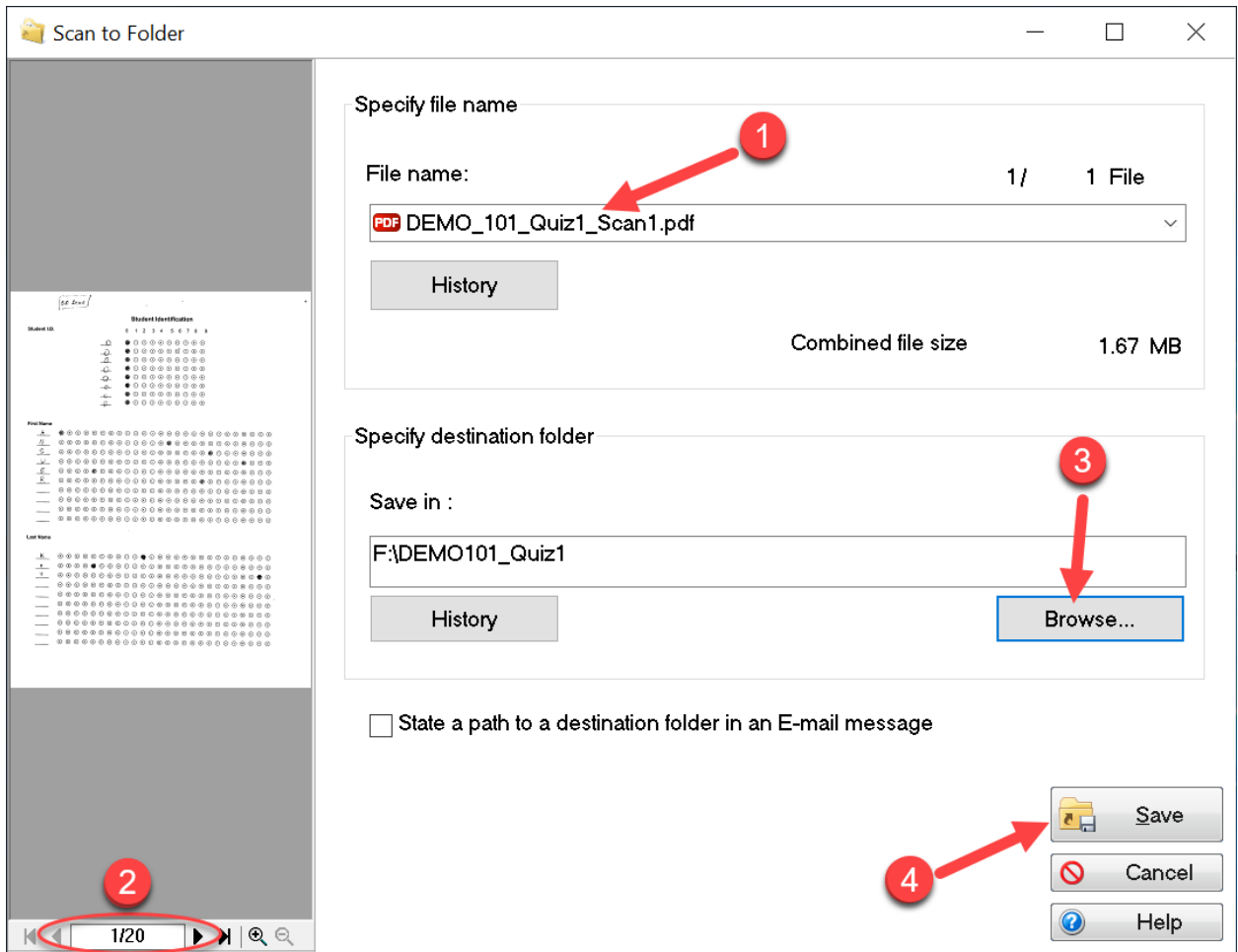


12. A ScanSnap window will appear once scanning is finished, click **Scan to Folder**.

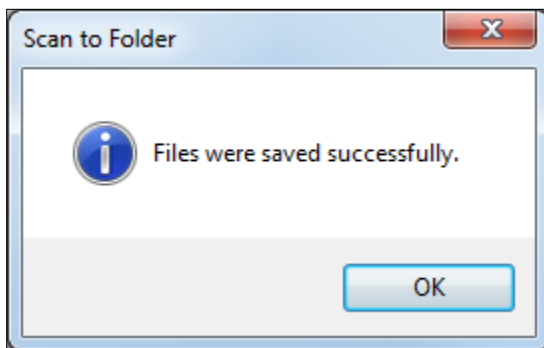




13. If you have more than **one version of the same exam**, you may want to change the file name to something recognizable (1), or else it is fine to leave it as is.
14. Check the number in the lower left corner (2) is double the amount of sheets you scanned. If not, please rescan.
15. Specify your destination save folder: Click **Browse (3)**
16. Click **Save (4)**



17. A notification will alert you when the file has saved successfully.





Optional: having more than one pile of answer sheets to scan.

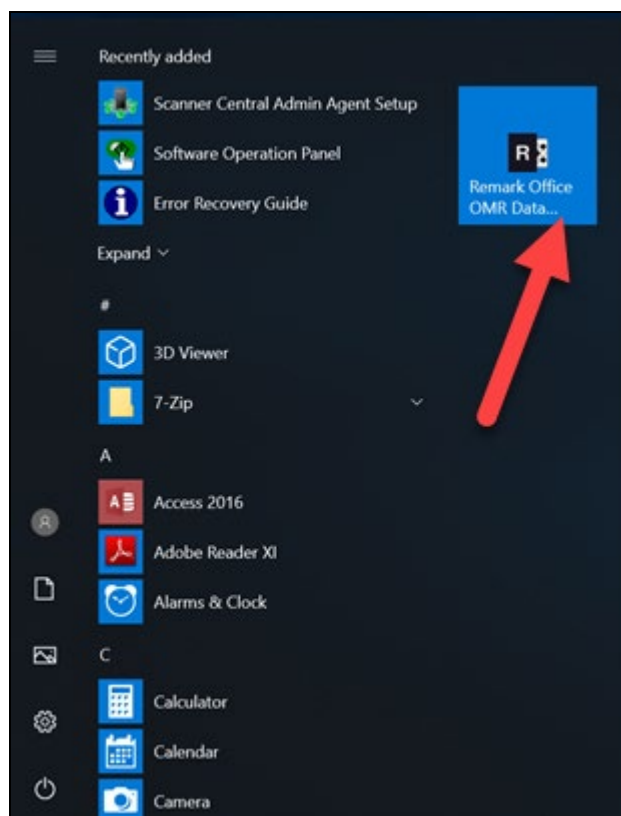
Repeat steps 9 – 17

1. **One section & one version:** there is no need to scan the answer key in the subsequent piles.
2. **Multiple sections & one version:** If there is a need to upload to Canvas directly or to export analysis reports for individual sections, scan the answer key with each individual section.
3. **Multiple sections & multiple versions:** Scan the answer key with each individual section and version.



IMPORTING DATA

1. Open Remark: **Start Menu > Remark Office OMR Data Center**

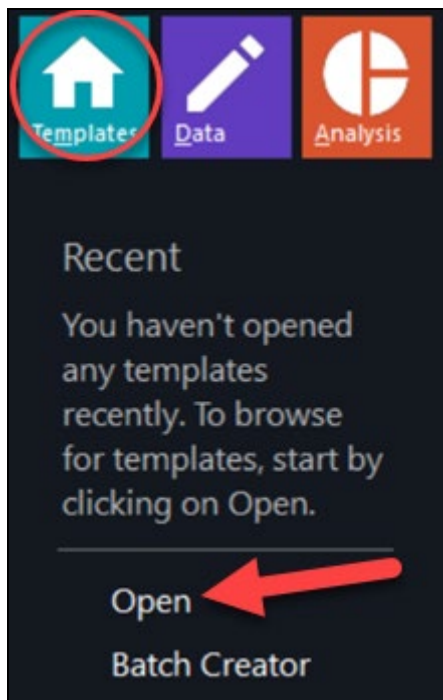


2. IF you are greeted with a Backwards Compatibility Warning, please check the **“I understand that backwards compatibility of my files is not supported”** box and then click the **Got It!** Button.



If you don't see this screen, continue to next step.

3. Click **Templates** on the left of the screen and then click **Open**.



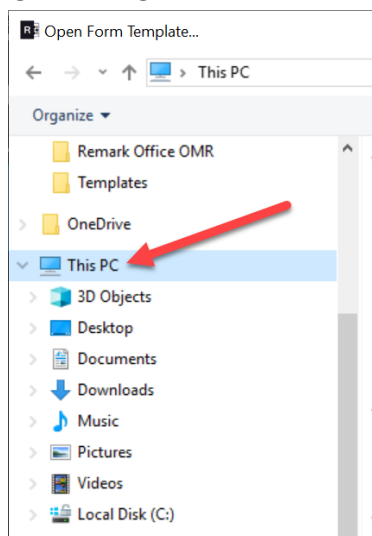
4. Navigate to the directory:

If you know how to navigate to a folder then please go to the following:

C:\Program Files (x86)\Gravic\Remark Office OMR\Templates

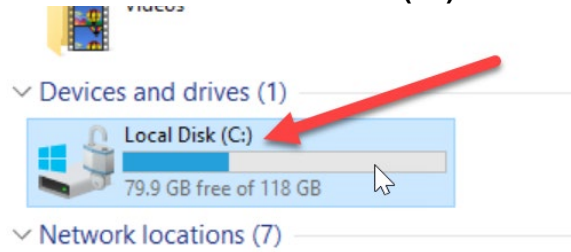
If you do not know how to navigate to a folder please follow the instructions below:

- 1) Click **This PC** on the left side of the window

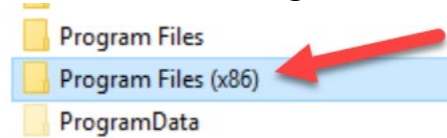




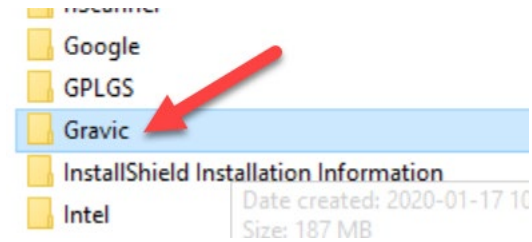
2) Double click on **Local Disk (C:)**



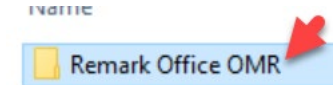
3) Double click on **Program Files (x86)**



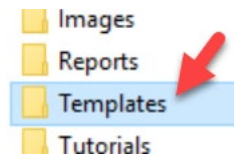
4) Double click on **Gravic**



5) Double click on **Remark Office OMR**



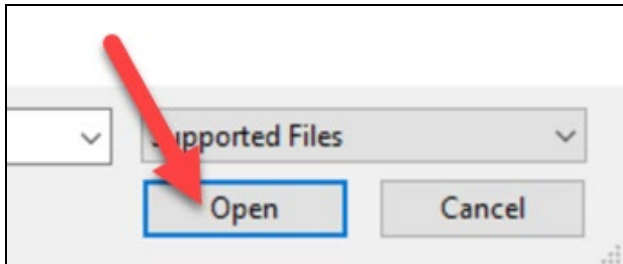
6) Double click on **Templates**



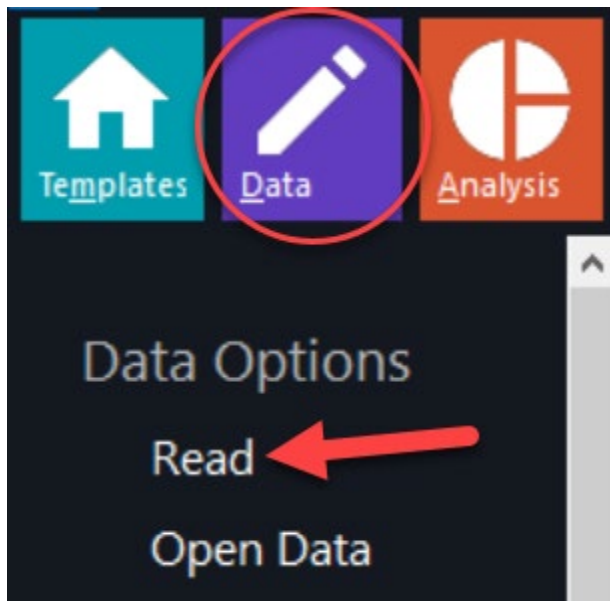


5. Choose either:

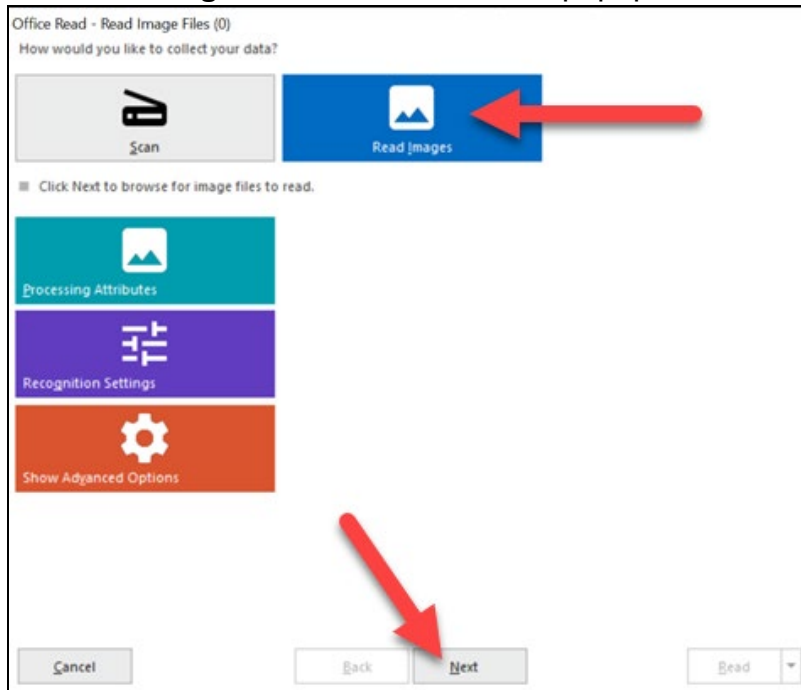
- “UBCO 100Q Template 2021.omr” for 100 question bubble sheets **or**
- “UBCO 200Q Template 2021.omr” for 200 question bubble sheets
and then click **Open**



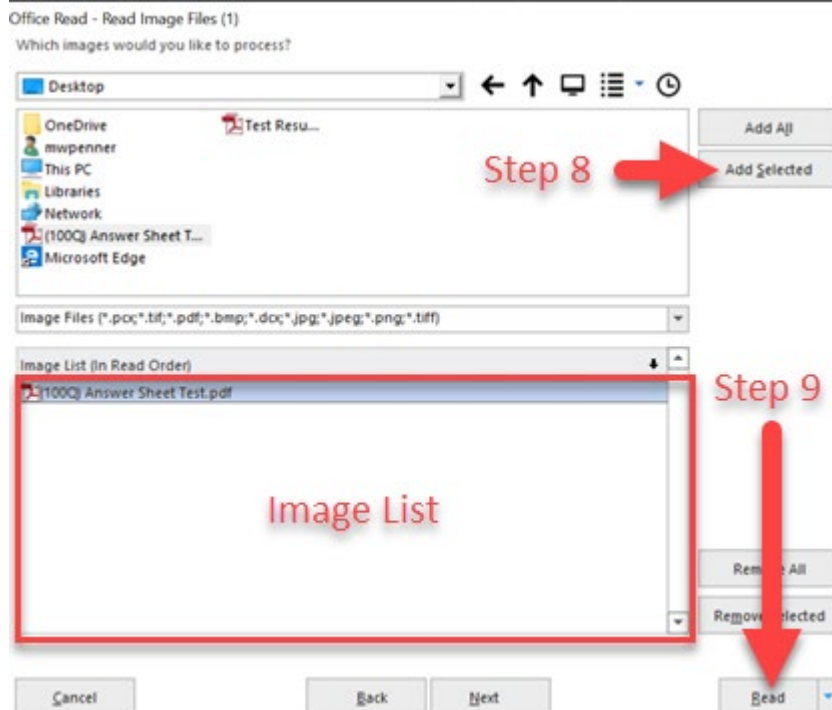
6. After the template has been opened click on the **Data** option on the left, then click on **Read**.



7. Select **Read Images** and click **Next** in the popup window that appears

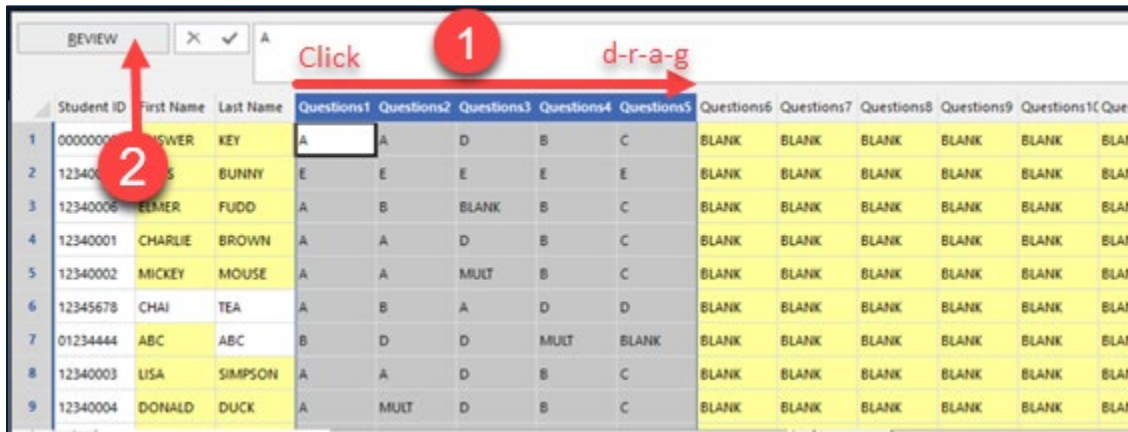


8. Navigate to the directory you created in H: drive and add the scanned files to the Image List below by double clicking on the file(s) (or click on the file(s) in order they were scanned and click **Add Selected**).
9. Click **Read**, the data will now be imported to the program.

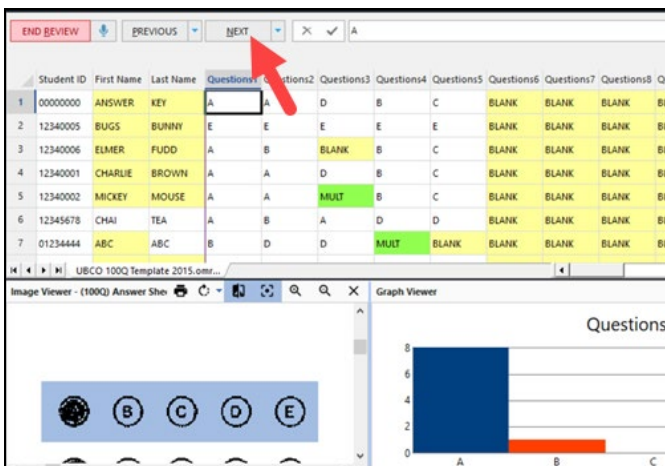




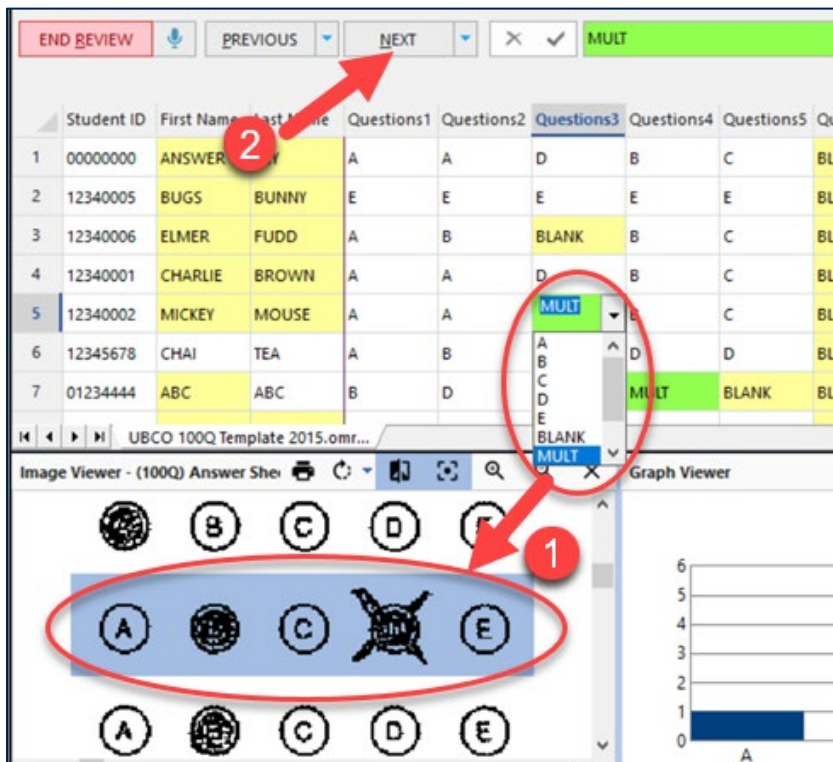
- To review the answers, select only the columns that are to be graded. Click on “Questions1” then click and drag (1) the mouse along the top to the last question of the exam (Note: It is acceptable to have “Blank” values to the right of the last question. The system reads all questions, regardless of how long the exam is; it reads the remaining questions as blank, thus meaning you don’t need to worry about them).
- Click **Review** (2)



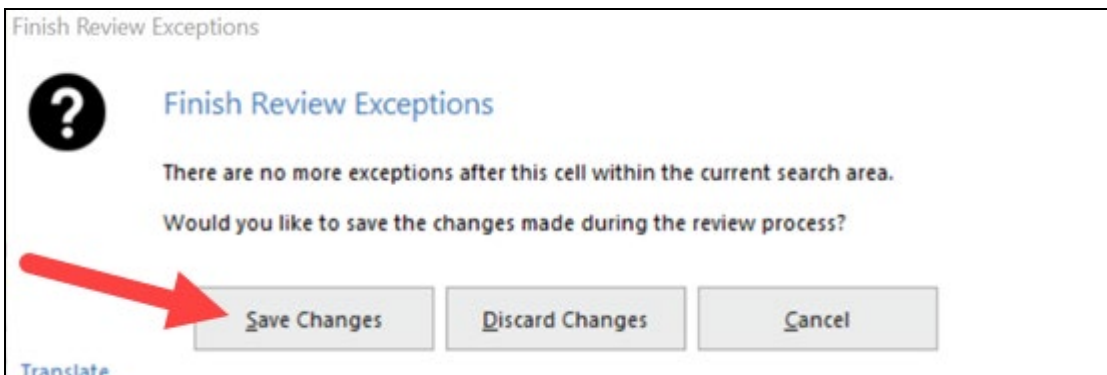
- You will be taken to the Review Exceptions screen. Click **Next** at the top of the screen to move to the next question needing your attention.



- The program will stop at any responses that are blank or have multiple answers. You can view the bubbling on the sheet from the Image Viewer below. Change the response by clicking the dropdown of each specific response. (1)
- Click **Next** (2) again to view the next error. The software will continue to stop on errors. There is no need to look for the errors manually.

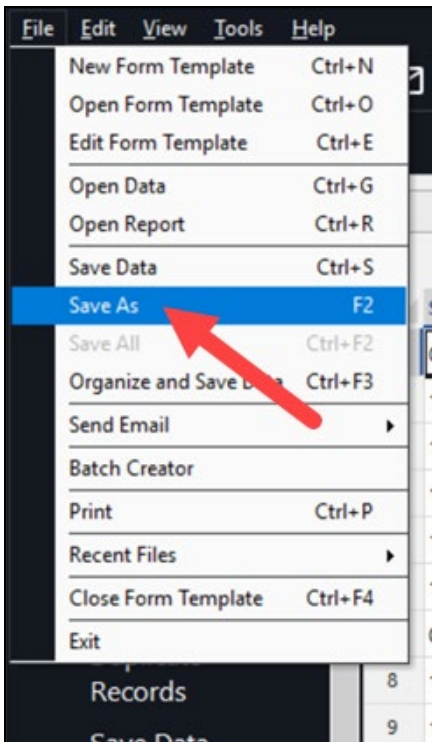


- After you have reviewed all the errors, a popup will notify you. Click **Save Changes** to continue. This step does NOT save changes to a file.

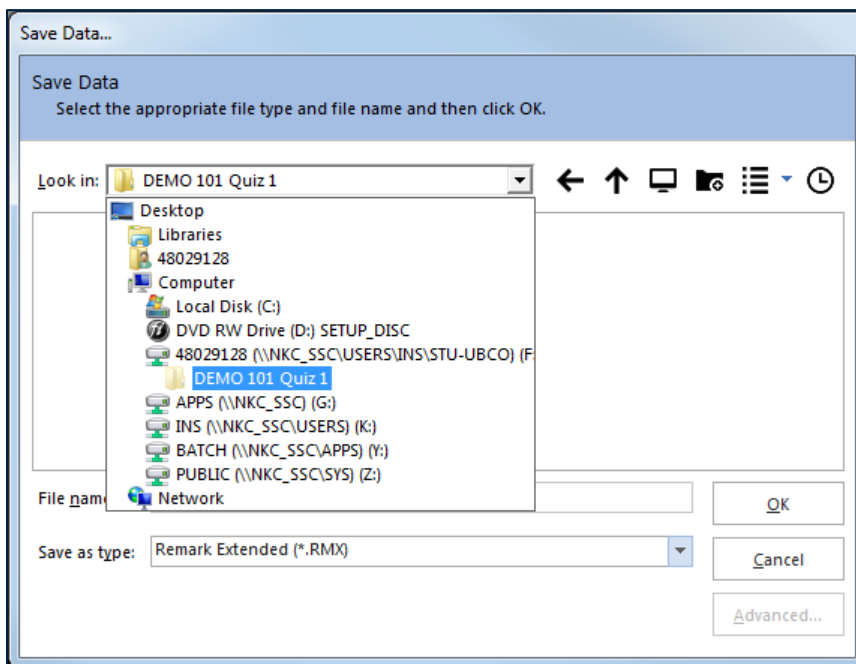




9. Save this file by selecting **FILE > Save As** from the top menu. Save in the folder you had previously created in the H: Drive.



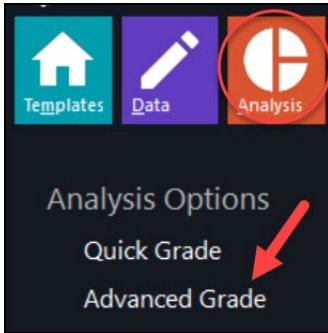
10. Name the file "Scanned results", and click OK. Note: leave the "Save as type:" set to Remark Extended (*.RMX)



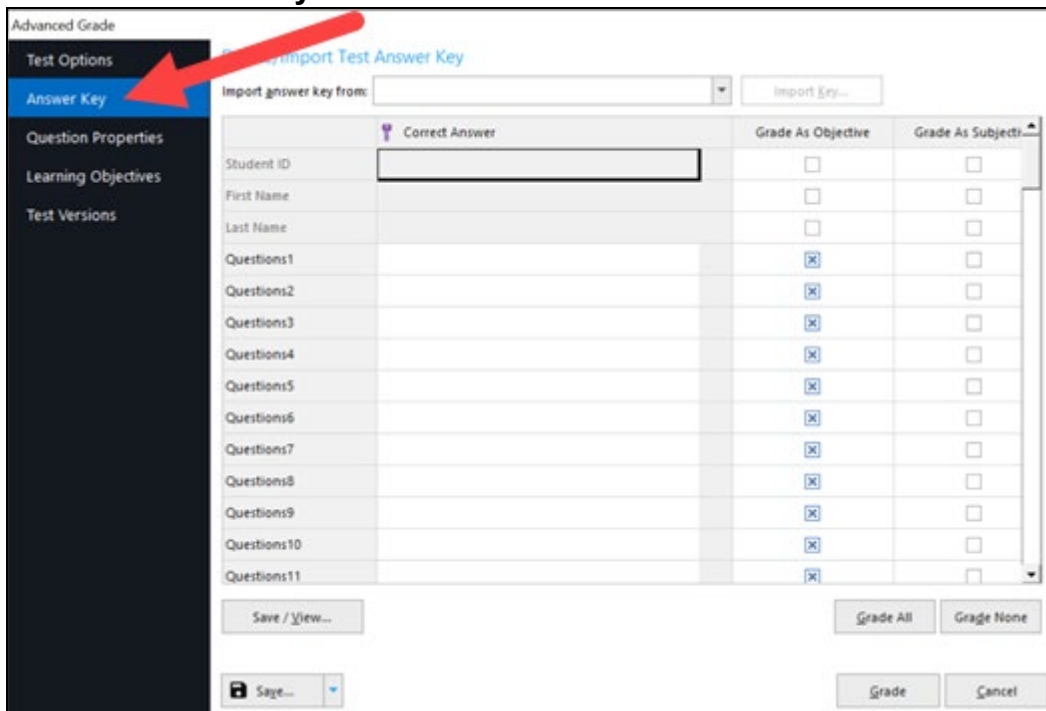


GRADING EXAMS

1. Under the Analysis tab, choose **Advanced Grade**



2. Click on **Answer Key** on the left sidebar





- From the “Import answer key from” dropdown menu, select “**Data Set (Grid) Row**” (1) and click **Import Key** (2).

Define/Import Test Answer Key

Import answer key from: Data Set (Grid) Row 1

Import Key... 2

	Grade As Objective	Grade As Subjective
Student ID	<input type="checkbox"/>	<input type="checkbox"/>
First Name	<input type="checkbox"/>	<input type="checkbox"/>
Last Name	<input type="checkbox"/>	<input type="checkbox"/>
Questions1	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Questions2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Questions3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Questions4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Questions5	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Questions6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Questions7	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Questions8	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Questions9	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Questions10	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Questions11	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Save / View... Grade All Grade None

Save... Grade Cancel



- 4. You should now see the answer key appear.
Optional: To omit a question from being graded, deselect “Grade as Objective” next to that question.

	Correct Answer	Grade As Objective	Grade As Subjective
Student ID	00000000	<input type="checkbox"/>	<input type="checkbox"/>
First Name	ANSWER	<input type="checkbox"/>	<input type="checkbox"/>
Last Name	KEY	<input type="checkbox"/>	<input type="checkbox"/>
Questions1	A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Questions2	A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Questions3	D	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Questions4	B	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Questions5	C	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Questions6	BLANK	<input type="checkbox"/>	<input type="checkbox"/>
Questions7	BLANK	<input type="checkbox"/>	<input type="checkbox"/>
Questions8	BLANK	<input type="checkbox"/>	<input type="checkbox"/>
Questions9	BLANK	<input type="checkbox"/>	<input type="checkbox"/>
Questions10	BLANK	<input type="checkbox"/>	<input type="checkbox"/>
Questions11	BLANK	<input type="checkbox"/>	<input type="checkbox"/>

Note: You can check if the answer key is correct by looking at the Student ID, First Name, and Last Name fields, as shown above. If you did not scan the answer key first, change the number (found between the dropdown and the Import Key button) to the sequence it was in.

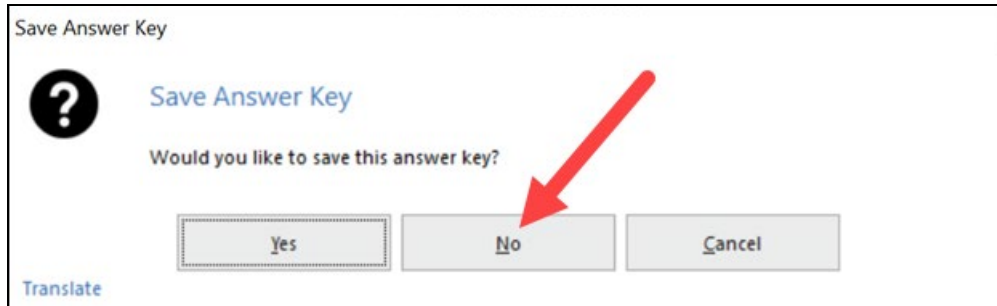
- 5. Click **Grade** at the bottom of the window. If there are any changes that you would like to make please check the optional section on pages 23-25 before completing this step.

No response points: 0.000
 Define benchmark value: %
 Extra credit question

Save... Grade Cancel

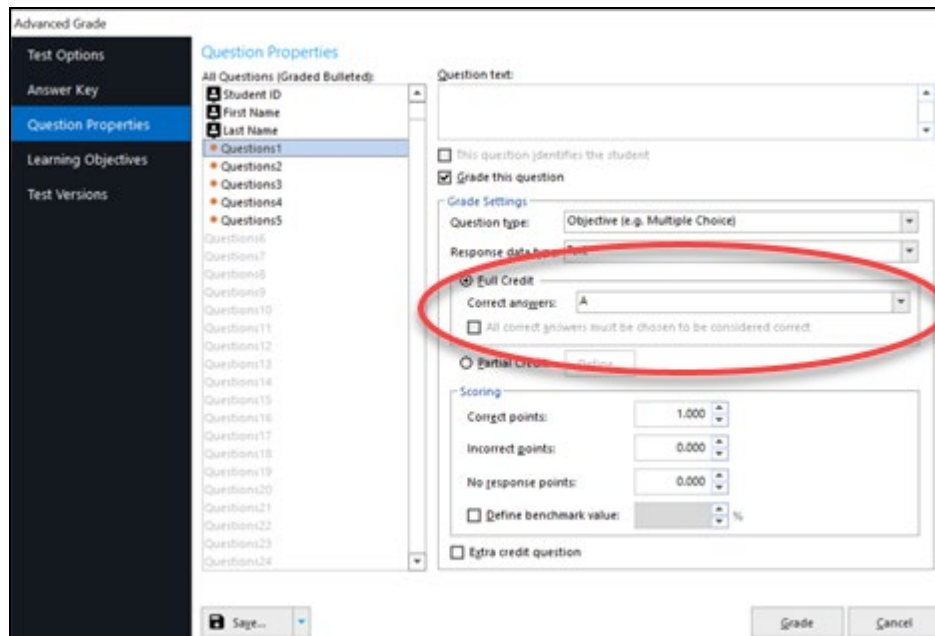


6. Select **No** when asked if you want to save the answer key



Optional: Changing the answer to a particular question:

If your answer key was incorrect, select the question you wish to change during this step and **type in** the correct answer.





Optional: Allowing more than one answer to a particular question
(answer one OR answer two):

On the left of the screen, select the question you wish to change, then **select** another correct answer from the “Correct answers” dropdown.

The screenshot shows the 'Grade Settings' for a question. The 'Question type' is set to 'Objective (e.g. Multiple Choice)' and the 'Response data type' is 'Text'. Under 'Grade Settings', 'Full Credit' is selected. The 'Correct answers' dropdown menu is open, showing options A, B, C, D, and E. A red circle highlights the dropdown menu. The 'Scoring' section shows 'Correct points' as 1.000, 'Incorrect points' as 0.000, and 'No response points' as 0.000. There is also a checkbox for 'Define benchmark value'.

This is the **OR** case.
i.e. A or B gets a point

*The AND case does not work with this template. Contact ctl.helpdesk@ubc.ca for help.



Optional: When a question is worth more or less than one mark

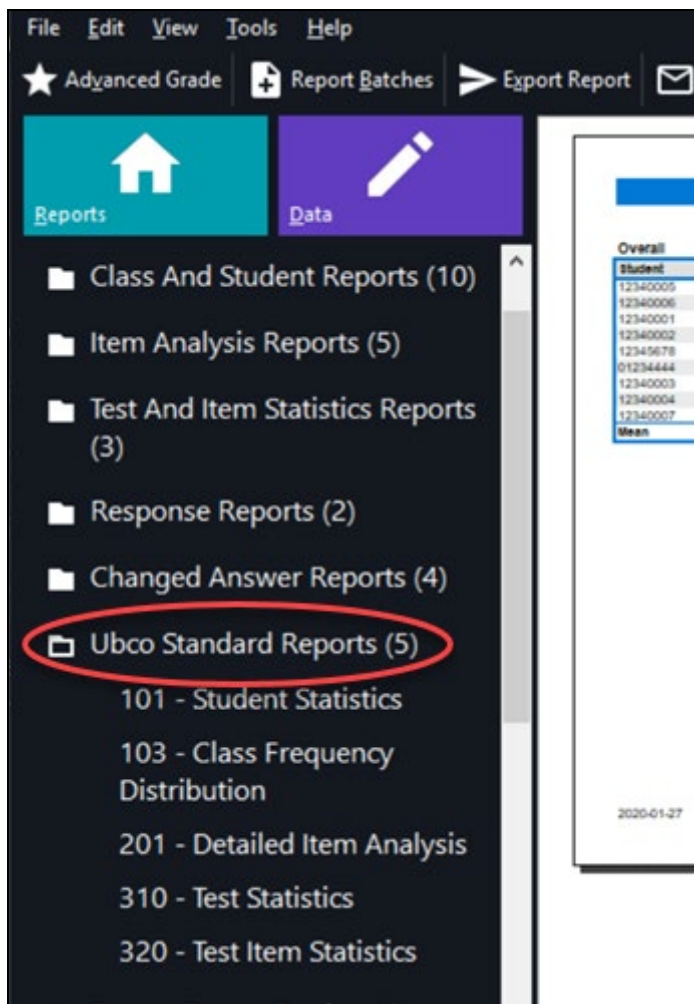
Select the question(s) you wish to change during this step and change “correct points” in the Scoring section.

The screenshot shows the 'Advanced Grade' interface. On the left is a navigation menu with 'Question Properties' selected. The main area is titled 'Question Properties' and shows a list of questions on the left and a configuration panel on the right. The 'Grade this question' checkbox is checked. Under 'Grade Settings', 'Question type' is 'Objective (e.g. Multiple Choice)' and 'Response data type' is 'Text'. The 'Full Credit' radio button is selected. In the 'Scoring' section, 'Correct points' is set to 2.000, 'Incorrect points' is 0.000, and 'No response points' is 0.000. A red circle highlights the 'Correct points' input field. At the bottom are 'Save...', 'Grade', and 'Cancel' buttons.



GENERATING ANALYSIS PDF REPORTS

1. After grading an exam, a new window called Remark Quick Stats will appear. Typically, instructors request the 5 reports included under the folder “Ubco Standard Reports” on the left side bar (you may need to scroll to find this folder). You may export any of these reports.

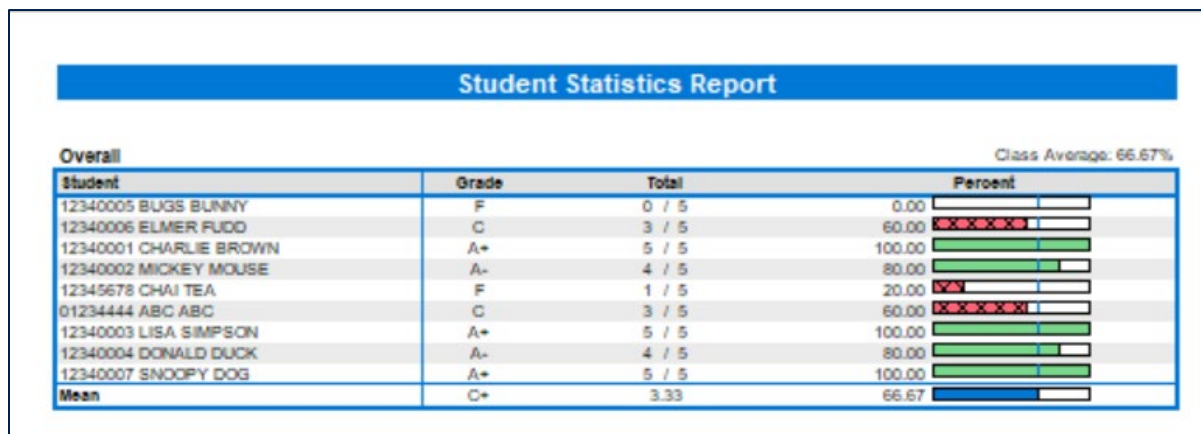


Please note: If any of the templates are not working under UBCO Standard Reports, then please check under the other reports to find the one you are looking for.

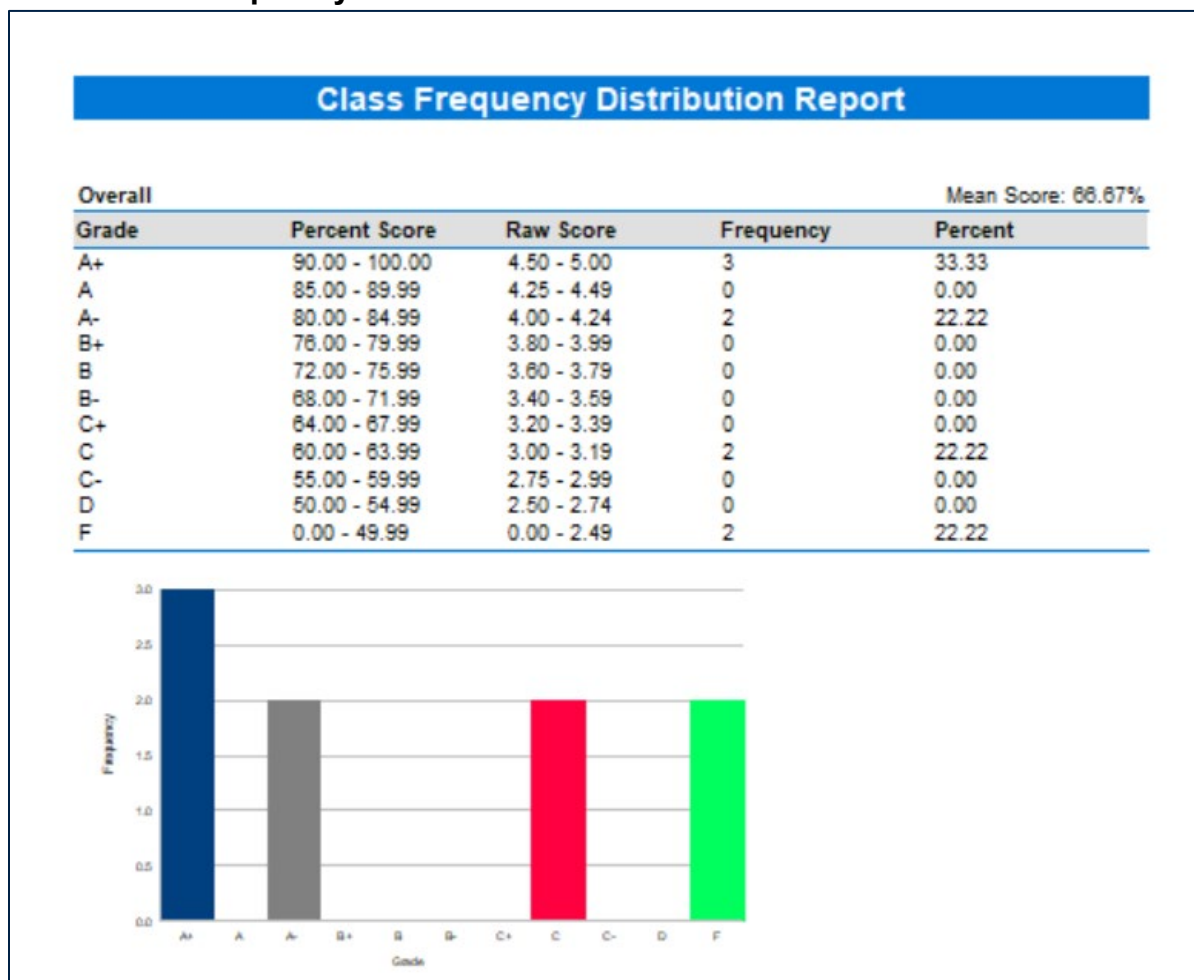
On the following pages are examples of the UBCO Standard Reports.



101 – Student Statistics Report

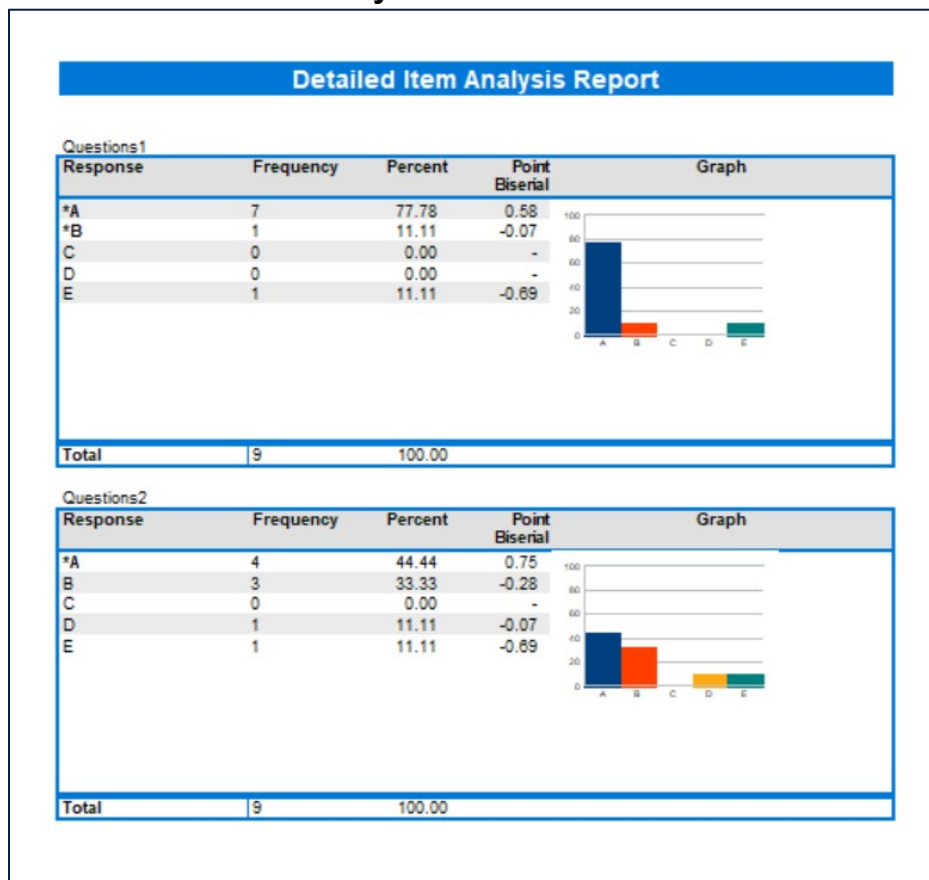


103 – Class Frequency Distribution

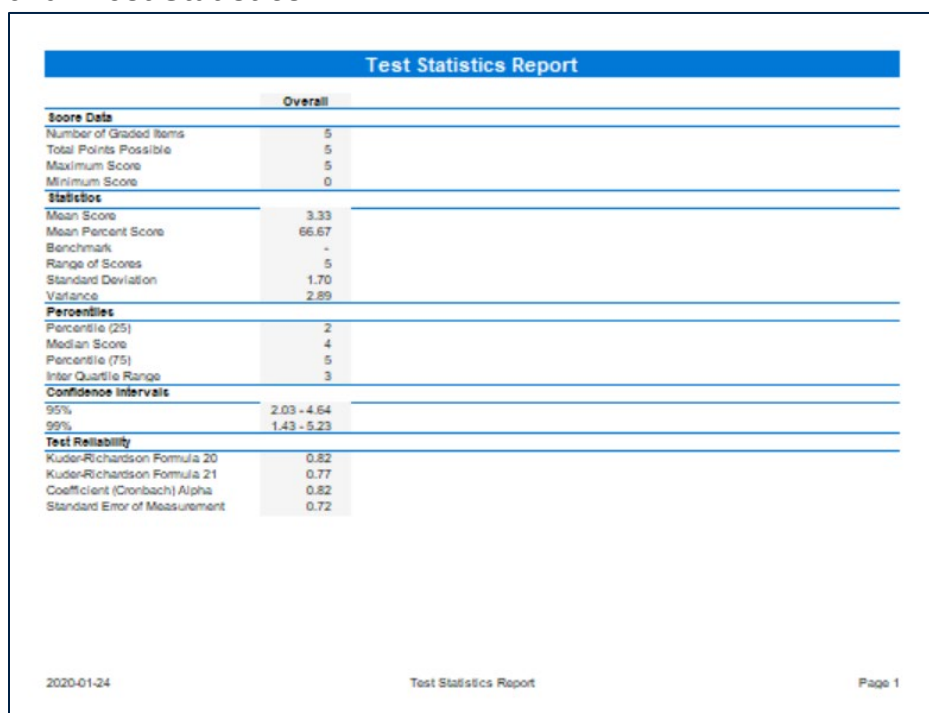




201 – Detailed Item Analysis



310 –Test Statistics



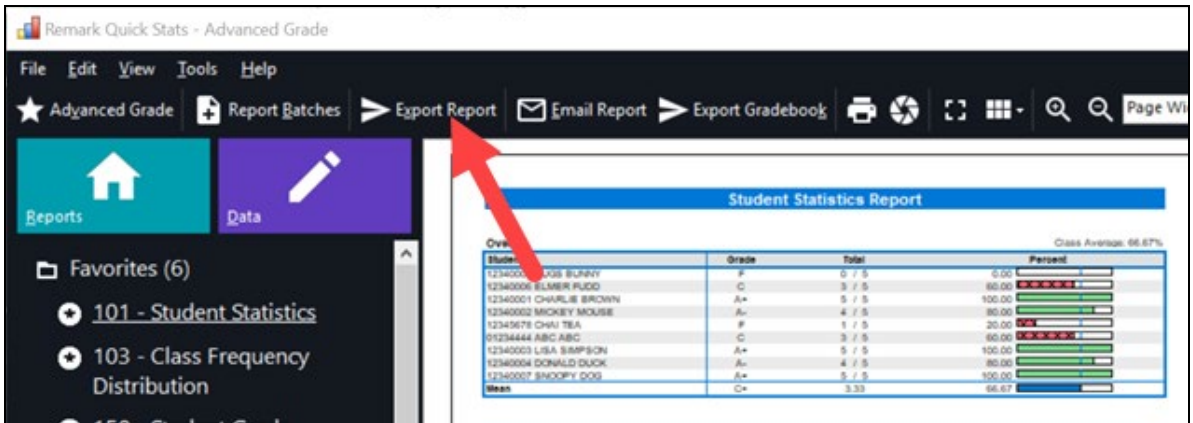


320 – Test Item Statistics

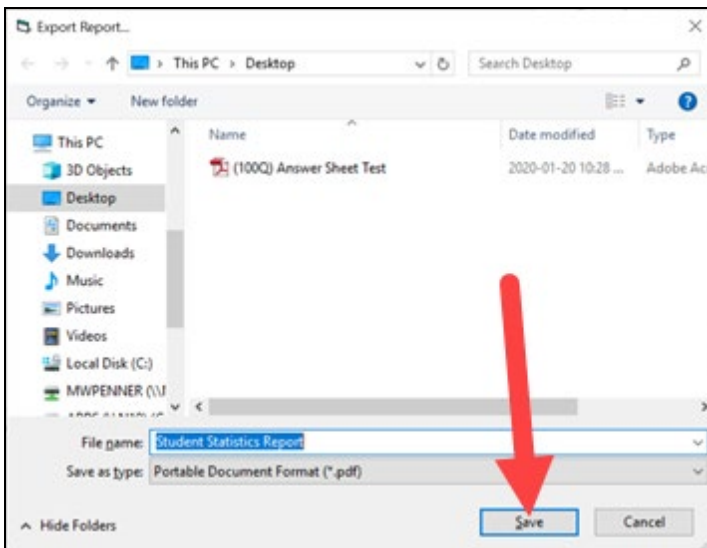
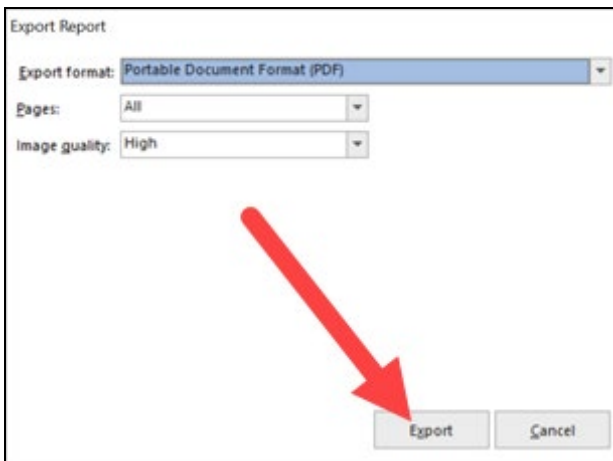
Test Item Statistics Report							
Question		Summary Statistics				Reliability	
Question	Points	Graded	Correct	Inoorreot	Missing	Point Beeftal	Percent Correct
Questions1	1	9	8	1	0	-	88.89
Questions2	1	9	4	5	0	0.75	44.44
Questions3	1	9	5	3	1	0.70	55.56
Questions4	1	9	7	2	0	0.89	77.78
Questions5	1	9	6	2	1	0.83	66.67



2. To export any of these reports, load the one you wish and click on **Export Report**



3. Click **Export** and select the folder you wish to save to





Optional: 150 – Student Grade

Student Grade Report

Legend: Incorrect

Students: 11234156 LIAM MARTIN

	Grade	Total Score	Score (%)
Overall	A-	9 / 10	80.00 <div style="width: 80%; background-color: #e0e0e0; border: 1px solid black;"></div>

Responses

Question	Response	Correct Answer	Question	Response	Correct Answer	Question	Response	Correct Answer
Questions1	B		Questions5	D		Questions9	A	
Questions2	C		Questions6	B		Questions10	C	
Questions3	D	A	Questions7	D	A			
Questions4	D		Questions8	D				

This report is located under “Ubco Advanced Reports” and creates a grade report for each individual student. It may take some time to generate the reports for the whole class, and the result file will be large.

Respondent Selection - Student Grade Report

Select the respondents you would like to use in this report.

Respondents:

- 12340005 BUGS BUNNY
- 12340006 ELMER FLOOD
- 12340001 CHARLIE BROWN
- 12340002 MICKEY MOUSE
- 12345678 CHAI TEA
- 01234444 ABC ABC
- 12340003 LISA SIMPSON
- 12340004 DONALD DUCK
- 12340007 SHOOPIY DOG

Selected respondents:

- 12340005 BUGS BUNNY
- 12340006 ELMER FLOOD
- 12340001 CHARLIE BROWN
- 12340002 MICKEY MOUSE
- 12345678 CHAI TEA
- 01234444 ABC ABC
- 12340003 LISA SIMPSON
- 12340004 DONALD DUCK
- 12340007 SHOOPIY DOG

Buttons: Add, Add All, Remove, Remove All, Run Report, Cancel

1 (points to Add All) 2 (points to Run Report)

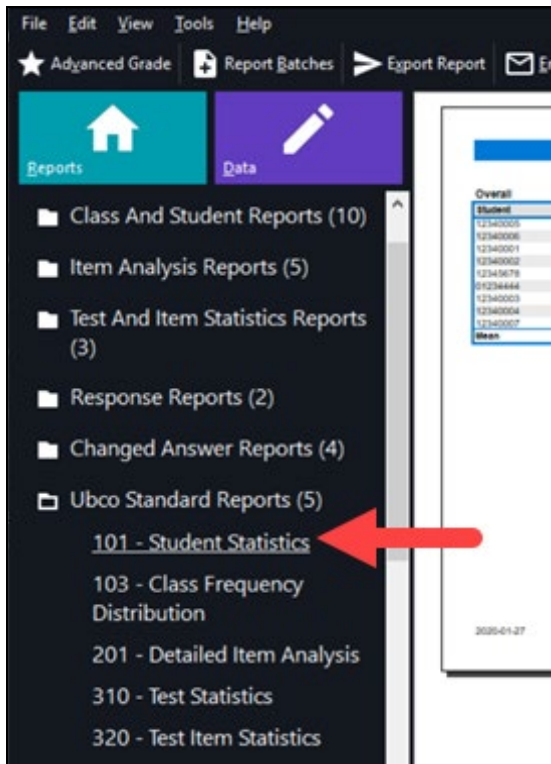
WARNING: Running this report may require significant system resources and may take time!

To generate it, click on **Add All** (1) to move all of the students to the “selected respondents” section, then click **Run Report** (2)

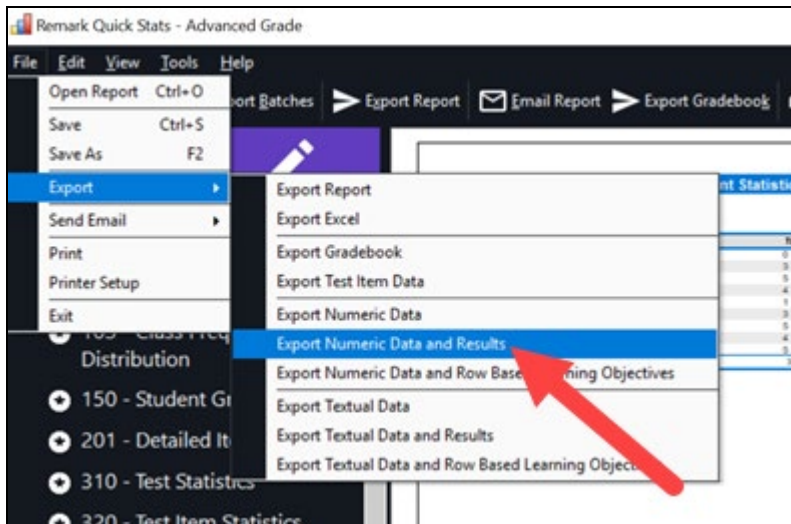


GENERATING RESULTS AS SPREADSHEET

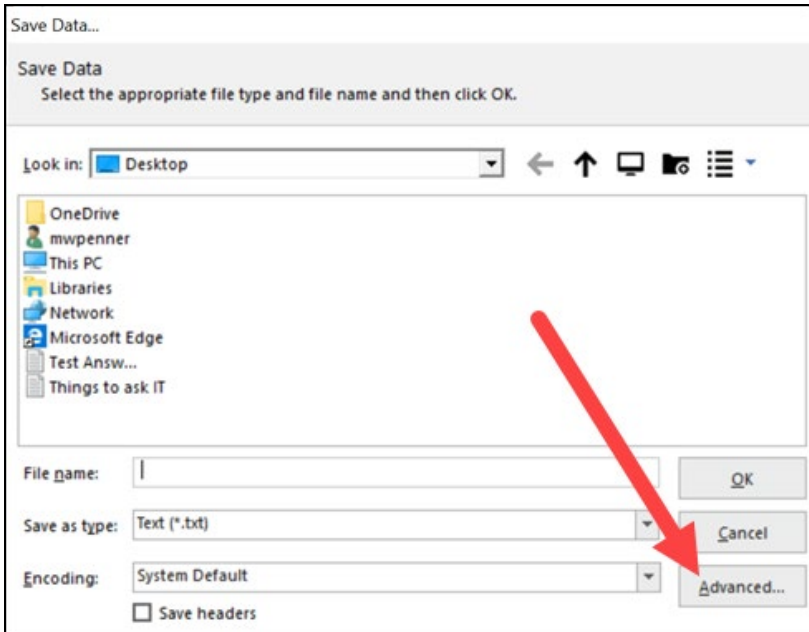
1. Under UBCO Standard Reports, select **101- Student Statistics**



2. Click on **FILE** on the upper left corner, hover to **Export**, then select **Export Numeric Data and Results**.



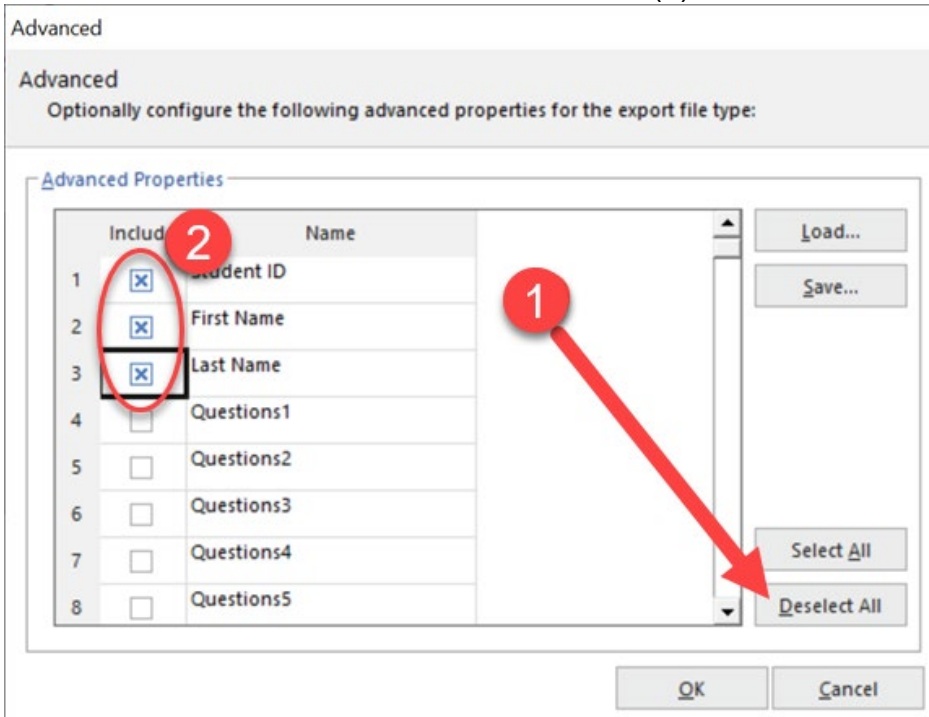
3. Click **Advanced**



4. Click **Deselect All** (1)

5. Choose the data you wish to include in your spreadsheet. Common selections include

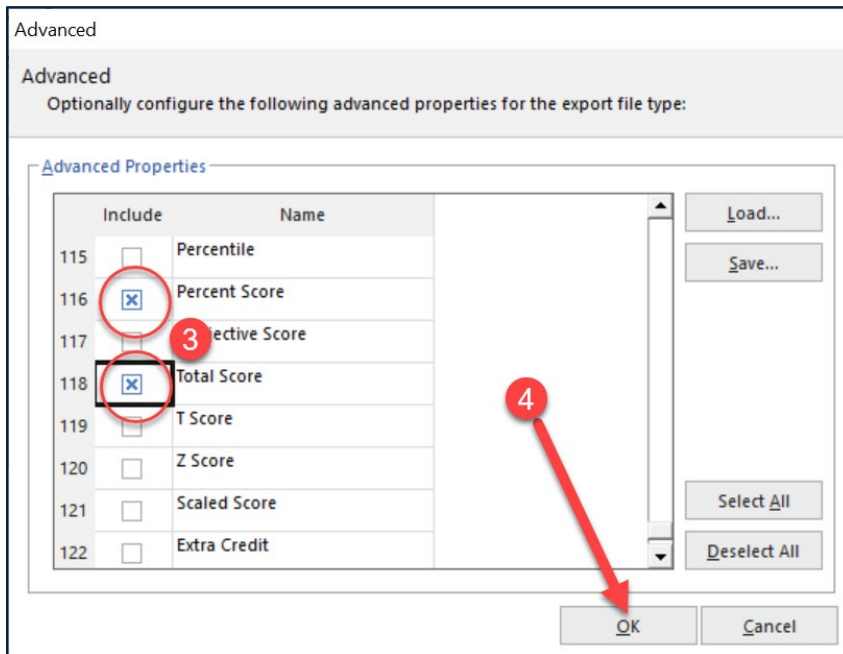
1. **Student ID**, 2. **First Name**, 3. **Last Name**, (2)





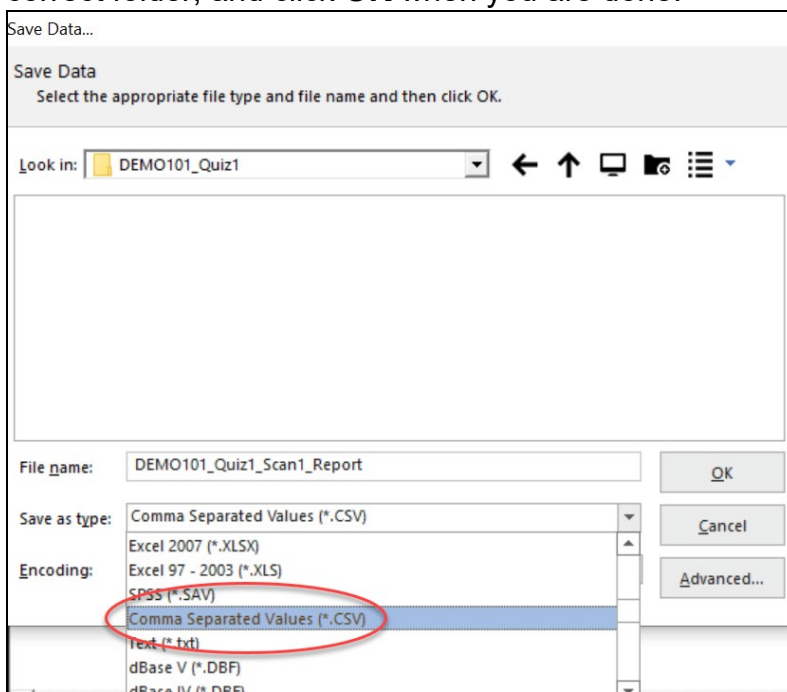
For 100Q Version: 116. **Percent Score** and 118. **Total Score**. (3)

For 200Q Version: 214. **Percent Score** and 216. **Total Score**. (not shown)



6. Click **OK** when you are done. (4)

7. Navigate to your desired save folder, name the file, and under “Save as type” below, choose **Comma Separated Values (*.CSV)**. Make sure you are saving in the correct folder, and click **OK** when you are done.





UPLOADING GRADES TO CANVAS

If you are grading an exam on a 100Q bubble sheet, you may use the following instructions. *For those using a 200Q bubble sheet, please come by the Centre for Teaching and Learning (ADM 103), and we can help you with the uploading process.*

We recommend all those uploading grades to Canvas for the first time contact the Centre for Teaching and Learning. Please come by or email ctl.helpdesk@ubc.ca!


1. The end goal is to modify your OMR spreadsheet (see below) so that it is readable by the Canvas Gradebook. Make sure the spreadsheet is saved as a CSV (Comma Separated Values) file.

START – OMR Output					END – Canvas-ready file				
	A	B	C	D		A	B	C	D
1	Student ID	First Name	Last Name	Total Score	1	Student	SIS User ID	Section	OMR Score
2	12345678	NAME	NAME	41	2				
3	12345678	NAME	NAME	33	3	Points Possible			100
4	12345678	NAME	NAME	45	4	First Name Last Name	12345678		67
5	12345678	NAME	NAME	48	5	First Name Last Name	12345678		87
6	12345678	NAME	NAME	34	6	First Name Last Name	12345678		65
7	12345678	NAME	NAME	46	7	First Name Last Name	12345678		90
8	12345678	NAME	NAME	45	8	First Name Last Name	12345678		89
					9	First Name Last Name	12345678		45

2. Three columns are essential for the Canvas Gradebook, and must be present in any spreadsheet uploaded to Canvas. They are:
 - a. The **Student** column, which contains the full name (first and last) of your students. These must be in one column—**Column A** in the Canvas-ready copy. See step 3 for instructions on how to combine columns.
 - b. You must also have at least one ID column—in this case, the **Student ID**.
 - c. The **Section** column, which will be **Column C** in the final document, can be left blank, as long as the header **Section** is there.
3. In order to combine the First Name (Column B) and Last Name (Column C) columns from the OMR Output spreadsheet into one **Student** column, you will need to insert a new column (Column A, which will shift all the other columns over by 1), and follow these steps:
 - a. For example, you would like to combine the first and last names of the first student on your list, Jane Doe, where “Jane” is cell C2 and “Doe” is cell D2.
 - b. You can put the full name in the cell A2 by using the following formula:
=PROPER(C2&" "&D2) --> make sure to leave a space between the quotation marks!
 - c. Copy the formula for all the other names, by hovering your mouse pointer over the small square on the bottom right corner of cell A2 (the mouse pointer will turn to a +), then double clicking. This will apply the formula to all the names.

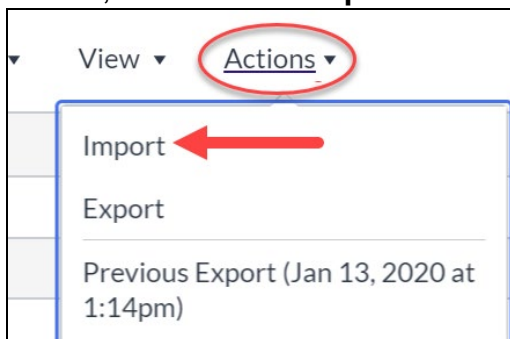
=PROPER(C2&" "&D2)



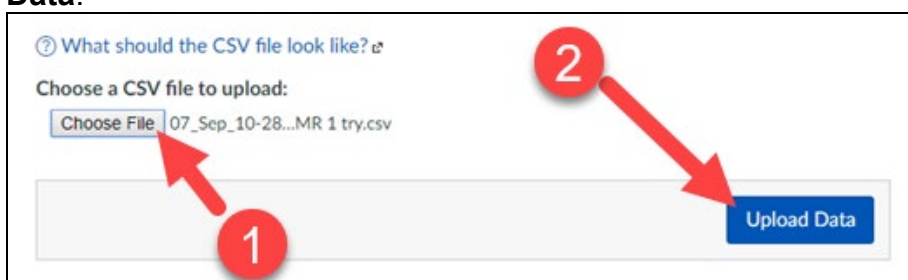
4. Now highlight Column A. You are going to copy and paste values into the same cells. While the cells are highlighted, enter the following keyboard shortcut: Ctrl+c, Ctrl+Alt+v, v, enter.
Alternatively you can, while the cells are still highlighted, click the right mouse button, and select Copy, then, without moving the mouse, right click again, and under Paste Options → Paste Special, click the Values icon . This will allow you to keep the names after you delete the original columns.
5. Delete the First Name and Last Name columns (C, D). Column E shifts to become **Column C**.
6. You must rename the Student Number column **SIS User ID**, and place it as **Column B** in the final copy by copying and pasting it to its final spot.
7. You must also rename the Total Score column a more appropriate name, depending on what the assignment was (eg. Midterm 1, Multiple Choice). If you already have a column for it in the Gradebook, this name must match the name in your Canvas Gradebook. In this example we are calling the column **OMR scores**.
8. At this point, you should have the **Student** column as **Column A**, the **SIS User ID** column as **Column B**, the **Section** column as **Column C**, and the **OMR scores** (or what you renamed it as) in **Column D**.
9. Insert two rows in between the column headers and the first row of data, so that in Column A you have “Student” in cell A1, and the first student name in cell A4. In cell **A3**, write “Points Possible” and then, in cell **D3**, write the highest number of points possible for the test. The scores should not surpass this number.
10. Save your file as type CSV. Your file should be ready for upload, and look similar to this:

	A	B	C	D	E
1	Student	SIS User ID	Section	OMR Score	
2					
3	Points Possible			100	
4	First Name Last Name	12345678		67	
5	First Name Last Name	12345678		87	
6	First Name Last Name	12345678		65	
7	First Name Last Name	12345678		90	
8	First Name Last Name	12345678		89	
9	First Name Last Name	12345678		45	
10	First Name Last Name	12345678		89	
11	First Name Last Name	12345678		98	
12	First Name Last Name	12345678		100	

11. Go into the Gradebook in Canvas and click on **Actions** at the top left side of the screen, then click on **Import**

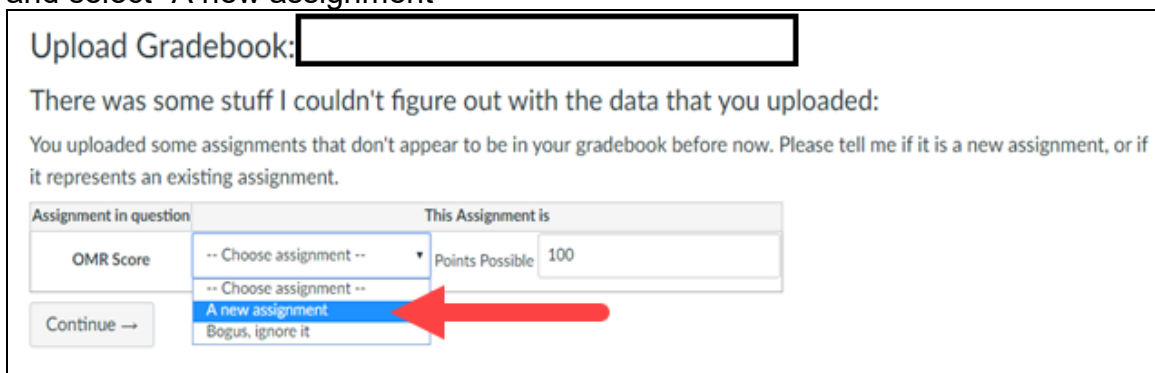


12. Select the file you have just prepared (must be in CSV format) and click on **Upload Data**.



13. If you already have a column for it in the Gradebook, and the header in the scores column matches the existing assignment name, skip this step.

In order for a column to appear in the Gradebook, Canvas will now prompt you to identify the OMR Scores column as an assignment. Click on the drop-down menu and select "A new assignment"



14. If any student names do not match the exact spelling and case as in the student list in Canvas, you will also be prompted to confirm who they are from the list in a drop-down menu.
15. Click on **Continue**, then on **Save Changes**. The Gradebook will have been updated, with your OMR scores column filled, or a new OMR assignment created.